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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,718	02/20/2004	William A. McCarty	KSCII.007CP2	5600

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KNOBBE MARTENS OLSON & BEAR LLP
2040 MAIN STREET
FOURTEENTH FLOOR
IRVINE, CA 92614

EXAMINER

LAO, LUN S

ART UNIT	PAPER NUMBER
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2615

NOTIFICATION DATE	DELIVERY MODE
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07/10/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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eOAPilot@kmob.com

Office Action Summary	Application No. 10/783,718	Applicant(s) MCCARTY ET AL.	
	Examiner LUN LAO	Art Unit 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Introduction

1. This action is response to the application filed on 02-20-2004. Claims 1-46 are pending.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-46 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-17, 26-49 and 58-64 of copending Application No. 10/353,805. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Consider claims 1-46, substantially all the claimed steps in these claims were recited in claims 1-17, 26-49 and 58-64 of the application 10/353,805, such as the steps of: “ a method for providing an audio signal and a control signal that is generated by an input device to a remote loudspeaker via a network, the method comprising: receiving an audio signal from the input device; extracting a characteristic from the audio signal; coding the characteristic into a control signal; and transmitting the audio signal and the control signal to a loudspeaker via the network” (see US patent application 10/353,805, Claims 1-17, 26-49 and 58-64).

Because claims 1-46 of US patent application 10/783,718 are similar in scope to claims 1-17, 26-49 and 58-64 of the US patent application 10/353,805 with obvious wording variation, they are both describing a transmitter configured to receive at least a second portion of the audio signal from the device and transmit audio signals to a remote loudspeaker. Claims 1-46 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-17, 26-49 and 58-64 of U.S. Patent application 10/353,805.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 1 recites the limitation "a transmitter configured to receive at least a second portion of the audio signal from the device and transmit audio signals to a remote loudspeaker" in claim 1. There is insufficient antecedent basis for this limitation in the claim. It is not clearly what a remote loudspeaker reference to.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 3, 27, 33-34, 36 and 44-45 are rejected under 35 U.S.C. 102(b) as being anticipated by Holl (US PAT. 5,181,247).

Consider claim 1 Holl teaches a home entertainment system comprising (see fig.7):
a left front channel loudspeaker (see fig.7 (16));
a right front channel loudspeaker (24); and
a housing enclosing (44),
a device providing one or both an audio signal and a video signal(44),
a center channel loudspeaker coupled to receive at least a first portion of said audio signal from the device(46), and

a transmitter (reads on the television set) configured to receive at least a second portion of the audio signal from the device and transmit audio signals to a remote loudspeaker (18, 26 and see col. 6 line 3-69).

Consider claim 3 Holl teaches the system further comprising a display device configured to display the video signal (see fig. 7 and see col. 6 line 3-69).

Consider claims 27 and 33-34 Holl teaches the system wherein the device is a TV (see fig.7) and wherein the device is a stereo receiver (see fig. 7 and see col. 6 line 3-69); and wherein the device is a media center(see fig. 7 and see col. 6 line 3-69).

Consider claim 36 Holl teaches a loudspeaker housing comprising (see fig. 8):
an input coupled to receive two or more signals (video and audio) from an input device;

a loudspeaker configured to broadcast one of the two or more received signals to a listener (16,24); and

a transmitter (44) configured to transmit one or more signals to a remote loudspeaker(18, 26 and see col. 6 line 3-69).

Consider claim 44 Holl teaches a home entertainment system comprising:

a housing enclosing at least a device providing an audio signal (see fig. 7 (46)) and a video signal (42), and a center channel loudspeaker (46);

a left front channel loudspeaker coupled to receive at least a portion of said audio signal (16);

a right front channel loudspeaker coupled to receive at least a portion of said audio signal (24); and a display device coupled to receive the video signal(42 and see col. 6 line 3-69).

Consider claim 45 Holl teaches that the system comprising at least one surround loudspeaker configured to receive at least a portion of said audio signal (see figs. 7-8 (18, 26) and col. 6 line 3-69).

8. Claims 42-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Harrison (US PAT. 5,666,422).

Consider claim 42 Harrison teaches a home entertainment system comprising (see figs 1-6):

a housing comprising a transmitter module configured to receive an audio signal from an input device and wirelessly transmit the signal to at least one remote loudspeaker, wherein the audio signal comprises a plurality of different audio tracks (1);

a device located within the housing and configured to provide the audio signal; and at least one loudspeaker external to said housing having a receiver configured to wirelessly receive the audio signal (8 in fig. 1 and see col. 3 line 35-col. 4 line 20).

Consider claim 43 Harrison teaches that the input device is configured to provide a video signal to a display device (fig. 1 and see col. 3 line 35-col. 4 line 20).

Claim Rejections - 35 USC § 103

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9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 39, 42 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holl (US PAT. 5,181,247).

Consider claim 39 Holl does not explicitly teach the loudspeaker housing wherein the one or more signals are transmitted using IR to the remote loudspeaker.

Holl does not limit his transmitted signal to remote loudspeaker to any specific kind. Transmitted using IR to the remote loudspeaker is well known in the art (office notice is taken by the examiner).

Therefore, it would have been obvious that the audio system as taught by Holl could have used an IR transmitting signal to remote loudspeaker as claimed. Since the system of Holl would have operated well using IR transmitting signal to the remote loudspeaker.

Consider claim 42 Holl teaches a home entertainment system comprising (see fig.7):
a housing comprising a transmitter module configured to receive an audio signal from an input device and transmit the signal to at least one remote loudspeaker (44), wherein the audio signal comprises a plurality of different audio tracks;

a device (4) located within the housing and configured to provide the audio signal;
and at least one loudspeaker external to said housing having a receiver configured to

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receive the audio signal(see figs. 7-8 (18, 26) and col. 6 line 3-69); but Holl does not explicitly teach a transmitter configured to wirelessly transmit the signal to the at least one surround loudspeaker.

However, a wireless communication system is well known in the art (the office notice is taken).

Therefore, it would have been obvious that the speaker system as taught by Holl could have used a transmitter configured to wirelessly transmit the signal to the at least one surround loudspeaker as claimed, so that the user can easily to moving the surround loudspeakers around to have better audio sound output.

Consider claim 46 Holl teaches the system wherein the housing further comprises a transmitter transmit the signal to the at least one surround loudspeaker (see figs. 7-8 (18, 26) and col. 6 line 3-69); but Holl does not explicitly teach a transmitter configured to wirelessly transmit the signal to the at least one surround loudspeaker.

However, a wireless communication system is well known in the art (the office notice is taken).

Therefore, it would have been obvious that the speaker system as taught by Holl could have used a transmitter configured to wirelessly transmit the signal to the at least one surround loudspeaker as claimed, so that the user can easily to moving the surround loudspeakers around to have better audio sound output.

11. Claims 2, 4-26, 28-32 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holl (US PAT. 5,181,247) in view of Clair, Jr. et al. (US PAT. 5,668,884).

Consider claim 2 Holl does not explicitly teach the system wherein the transmitter transmits a combined control and audio signal to the remote loudspeaker; and a remote loudspeaker having a receiver configured to receive the combined signal from the transmitter and extract the control signal and the audio signal from the combined signal.

However, Clair teaches the system wherein the transmitter transmits a combined control and audio signal to the remote loudspeaker; and a remote loudspeaker having a receiver configured to receive the combined signal from the transmitter and extract the control signal and the audio signal from the combined signal (see fig.3 and col. 8 line 3-col. 9 line 67).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Clair into Holl to provide more efficiency to control communication system.

Consider claims 4-7 Holl as modified by Clair teaches the system wherein the remote loudspeaker further comprises a Digital Signal Processor (DSP)(reads on microprocessor) module configured to manipulate the audio signal based on the extracted control signal(Clair, col. 8 line 3-col. 9 line 67); and wherein the remote loudspeaker further comprising a digital amplifier configured to digitally amplify the audio signal(Clair, see fig.3 and col. 8 line 3-col. 9 line 67); and wherein the combined signal includes an address signal which is associated with the remote loudspeaker

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(Clair, see figs 1-3 and col. 5 line 65-col. 7 line 67); and wherein the combined signal is transmitted to the remote loudspeaker via a network (Clair, see figs 1-3 and col. 5 line 65-col. 7 line 67).

Consider claim 9 Holl as modified by Clair teaches the network is wireless (in Clair, see figs 1-3 and col. 5 line 65-col. 7 line 67).

Consider claims 8, 10-11 Holl as modified by Clair does not explicitly teach the network is a powerline; and; the network is RF; and the network is IR. While Holl teaches a network system and Holl does not limit his network system to any specific kind. The network is a powerline; and; the network is RF; and the network is IR are well known in the art (office notice is taken by the examiner).

Therefore, it would have been obvious that the audio system as taught by Holl could have used an network is a powerline; or the network is RF; or the network is IR as claimed. Since the system of Holl would have operated well using network is a powerline; or the network is RF; or the network is IR for communication system.

Consider claim 12 Holl as modified by Clair does not explicitly teach the system wherein the transmitter is configured to convert the audio signal from an analog form to a digital form.

However, an analog form convert to the digital from, it is well known in the art (office notice is taken by the examiner).

Therefore, it would have been obvious that the audio system as taught by Holl and Clair could have been a analog to digital converter as claimed in order to achieve a hi-fidelity audio signal processing system.

Consider claims 13-20 Holl as modified by Clair teaches the system wherein the control signal is analog (Clair, see fig.3 and col. 8 line 3-col. 9 line 67); and wherein the audio signal is digital (Clair, see fig.3 and col. 8 line 3-col. 9 line 67); and wherein the control signal is digital (Clair, see fig.3 and col. 8 line 3-col. 9 line 67); and wherein the control signal is a volume level (Clair, see fig.3 and col. 8 line 3-col. 9 line 67); and wherein the control signal is a balance level (Clair, see fig.3 and col. 8 line 3-col. 9 line 67); and wherein the control signal is a fader level (Clair, see fig.3 and col. 8 line 3-col. 9 line 67); and wherein the control signal is a sub-bass level (col. 6 line 3-69); and wherein the control signal is a destination source which is associated with the remote loudspeaker (Clair, see fig.3 and col. 8 line 3-col. 9 line 67).

Consider claims 21-22 and 25-26 Holl as modified by Clair teaches the system wherein the control signal is a sound processing selection (in Clair, see fig.3 and col. 8 line 3-col. 9 line 67); and wherein the control signal is an equalizer level (Clair, see fig.3 and col. 8 line 3-col. 9 line 67); and wherein the control signal is a time delay (in Clair, see fig.3 and col. 8 line 3-col. 9 line 67); and wherein the control signal is a phase delay (in Clair, see fig.3 and col. 8 line 3-col. 9 line 67).

Consider claims 23-24 Holl does not explicitly teach the system wherein the control signal is a power on; and wherein the control signal is a power off.

However, the control signal is a power on; and the control signal is a power off. They are well known in the art (office notice is taken).

Therefore, it would have been obvious that the network system as taught by Holl could have a control is a power on or power off as claimed to provide a saving power energy system.

Consider claims 28-32 and 35 Holl does not explicitly teach the device is a PC; and the device is a MP3 player; the device is a DVD player; and the device is a cable set top; the device is a satellite set top; and the device is a DAT.

While Holl and Clair teach a audio system, Holl and Clair do not limit his audio divece to any specific kind. Audio device of many kinds are well known in the art (office notice is taken).

Therefore, it would have been obvious that the network system as taught by Holl and Clair could have been a PC device; or a MP3 player device; or a DVD player device; or a cable set top device; or a satellite set top device; or a DAT device as claimed. Since the systems of Holl and Clair would have operated well using any of these kinds of audio device.

12. Claims 37-38 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holl (US PAT. 5,181,247) in view of Lindemann Jr. et al. (US 2004/0223622).

Consider claim 37 Holl does not explicitly teach the loudspeaker housing further comprising: an amplifier module configured to convert one of the two or more received signals to pulse width modulation; and a power stage module configured to amplify the pulse width modulation signal.

However, Lindemann teaches the loudspeaker housing further comprising: an amplifier module configured to convert one of the two or more received signals to pulse width modulation; and a power stage module configured to amplify the pulse width modulation signal (see figs, 1, 7 and 10-11 page 6 [0073]).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Lindemann into Holl to provide a power amplifier with clearly benefit in terms of audio fidelity.

Consider claims 38 and 41 Holl as modified by Lindemann teaches the remote loudspeaker is a subwoofer (Lindemann, see figs, 1, 7 and 10-11 page 6 [0073]); and wherein the second and third signals are transmitted using an RF network to the remote loudspeaker (Lindemann, see figs, 1, 7 and 10-11 page 6 [0073]).

13. Claims 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holl (US PAT. 5,181,247) in view of Schaeffer. JR. et al. (US 2003/0062990).

Consider claim 40 Holl does not explicitly teach the loudspeaker housing wherein the one or more signals are transmitted using powerline to the satellite loudspeaker.

Schaeffer teaches the loudspeaker housing wherein the one or more signals are transmitted using powerline to the satellite loudspeaker (see fig. 6 and page 1 [0010]-page 2[0021]).

Therefore, it would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Schaeffer into Holl to provide the

system in any building that includes electrical outlets in the room where access to the data is required.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Jung (US PAT. 6,041,225) is cited to show other related wire, wireless, infrared, and powerline audio entertainment systems.

15. Any response to this action should be mailed to:

Mail Stop ____ (explanation, e.g., Amendment or After-final, etc.)

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Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lao, Lun-See whose telephone number is (571) 272-7501. The examiner can normally be reached on Monday-Friday from 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin, can be reached on (571) 272-7848.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 whose telephone number is (571) 272-2600.

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/Lun-See Lao/
Examiner, Art Unit 2615
Patent Examiner
US Patent and Trademark Office
Knox
571-272-7501
Date 07-04-2008

/Vivian Chin/
Supervisory Patent Examiner, Art Unit 2615